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**Amendments to the Specification**

Please replace the paragraph beginning at page 1, line 14 with the following amended paragraph:

An image system, like a scanner, [[it]] typically possesses problems such as image defects or distortion of intensity owing to (a) the photo-response non-uniformity of the light source, the mirror, the lens and the charged-coupled device (CCD), (b) [[;]] the aging of the system and, (c) the effects resulting from a dusty environment. Therefore, image information of an object captured by the image system is required to compensate or calibrate.

Please replace the paragraph beginning at page 1, line 22 with the following amended paragraph:

Referring to FIG. 1, which is a ~~schematically~~ schematic cross-sectional view of a prior flat bed scanner 101. A white calibration plate 102 is provided outside a document sheet read area. A document sheet 104 is mounted on a document sheet table glass 103 and secured by a cover 112. The white calibration plate 102 is read prior to the reading of the document sheet 104 and the read signal is stored in a memory. When the document sheet 104 is scanned, a linear light source 105 illuminates on the document sheet 104. The reflected light from the document sheet 104 is directed to mirrors 106, 107 and 108 and directed to a charge-coupled device (CCD) 110 through a lens 109. An output of the CCD 110 as a document sheet read electrical signal is sent to an A/D converter (not shown) established within a signal processing unit (not shown) to convert the electrical signal into a digital signal. For a color image-scanning device, the charge-coupled device 110 includes three linear sensors, respectively R linear sensor, G linear sensor and B linear sensor. Each of the three linear sensors includes a plurality of photo-sensing elements, and each of the photo-sensing elements provides a sensing value for one pixel.

Please replace the paragraph beginning at page 4, line 7 with the following amended paragraph:

In order to achieve the above objectives of this invention, the present invention provides a calibration method of an image scanning system. The image scanning system has an image reading device for reading image information of an object. The image reading device is provided with at least a linear sensor consisting of a plurality of photo-sensing elements. The calibration method comprises the step of reading image information from a calibration plate having a plurality of pixels at least in a row, a sensing value of each photo-sensing element of the image reading device corresponding to one of the pixels of the calibration plate. A ~~Determining a~~ base value may be determined in accordance with the sensing values of the calibration plate. ~~Computing respective~~ Respective differences may be computed between the adjacent sensing values of the calibration plate. ~~Storing the~~ base value and the respective differences may be stored. ~~Calibrating image~~ Image information of an object captured by the image scanning system may be calibrated. The base value is added to a first sensing value of the image information of the object and each sequential sensing value of the image information of the object is added by one of the respective differences corresponding thereto.

Please replace the paragraph beginning at page 7, line 6 with the following amended paragraph:

Referring to FIG. 3 and FIG. 4, in the first preferred embodiment of the present calibration method, at step 401, initially, scanning a calibration plate, for example, a white calibration plate or a black calibration plate, to capture image information of the calibration plate through an image reading device 30 for being used as calibration data. The calibration plate has a plurality of pixels at least in a row. The image reading device 30 comprises at least a linear sensor consisting of a plurality of photo-sensing elements. A sensing value of each photo-sensing element corresponds to a pixel of the calibration plate. Continuously, at step 402, a central processing unit (CPU) of a host computer 38 computes calibration data of each scan line reading from the calibration plate to generate calibration data corresponding to each photo-sensing

element, i.e. a sensing value of each photo-sensing element. At step 403, ~~determining~~ a base value may be determined in accordance with all the sensing values of the image reading device 30 reading from the calibration plate. The base value can be a minimum sensing value or an average value of a minimum sensing value and a maximum sensing value. Continuously, at step 404, the central processing unit (CPU) computes differences between adjacent sensing values; and at step 405, storing the base value and the differences respectively in a base value storage region 324 and a calibration memory 34. A bit number used for storing one of the differences is determined depending on a distribution range of the differences. For example, when the differences of the adjacent sensing values are below 7 levels, i.e. between negative 7 levels and positive 7 levels, it only requires 4-bit memory volume for storing one of the differences. At step 406, performing a normal scan action to capture image information of an object through the image reading device 30, and then sending the output of the image reading device 30 to an analog/digital converter (A/D converter) 321 for digitizing a sensing value of each photo-sensing elements of the image reading device 30. At step 407, the central processing unit of the host computer 38 simultaneously reads the base value or the difference, corresponding to each photo-sensing element, respectively from the base value storage region 324 and the calibration memory 34, and calibrating the image information of the object through a compensating/computing circuit 322; wherein, through an additive circuit (step 408), the base value is added to a first sensing value of the image information of the object and each of the sequential sensing values of the image information is added by the difference corresponding thereto. As a result, each of the sensing values of the image information of the object is recovered to a true value. At step 409, the calibrated image information of the object is stored in a buffer memory 36. The calibrated image information stored in the buffer memory 36 is sent to the host computer 38 through an interface 325. The A/D converter 321, compensating/computing circuit 322 and additive circuit 323 can be established in an application specific integrated circuit (ASIC) 32. Furthermore, subsequent image information captured by a normal scan action from another object can be calibrated via step 407 and step 408.